

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

REC'D 27 MAY 2005

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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/IB2005/050802

International filing date (day/month/year)
04.03.2005

Priority date (day/month/year)
25.03.2004

International Patent Classification (IPC) or both national classification and IPC
H04B7/26, H04B1/707

Applicant
KONINKLIJKE PHILIPS ELECTRONICS N.V.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office - Gitschiner Str. 103
D-10958 Berlin
Tel. +49 30 25901 - 0
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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2005/050802

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
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International application No.
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Box No. V Reasoned statement under Rule 43b/s.1(a)(i) with regard to novelty, Inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-39
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-39
Industrial applicability (IA)	Yes: Claims	1-39
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item V.

1 Reference is made to the following documents:

- D1 : US 2002/110099 A1 (ZEIRA ARIELA ET AL) 15 August 2002 (2002-08-15)
D2 : MAYER J ET AL: "Handoff protocols in JD-CDMA" PERSONAL, INDOOR AND
MOBILE RADIO COMMUNICATIONS, 1998. THE NINTH IEEE
INTERNATIONAL SYMPOSIUM ON BOSTON, MA, USA 8-11 SEPT. 1998,
NEW YORK, NY, USA, IEEE, US, vol. 1, 8 September 1998 (1998-09-08),
pages 355-359, XP010314789 ISBN: 0-7803-4872-9

2. Objections to Article 33 PCT:

2.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 does not involve any inventive step in the sense of Article 33(3) PCT.

Document D1 discloses (the references in parentheses applying to this document):
A method for implementing downlink Joint Detection in TDD CDMA communication systems to be performed in the UE, comprising the steps of:

- a) receiving downlink signal from a network system in a specific timeslot; (paragraphs 17 and 18);
- b) obtaining an active primary and secondary channelisation codes in the specific timeslot, through processing the downlink signal (using the mapping between midambles and channelisation codes, and using a dedicated channel providing the necessary information for the remaining uncertainty, see paragraphs 18 and 21)
- c) acquiring the initial ACC (Active Channelisation Codes) information for use in implementing Joint Detection in next radio frame, through **a midamble detection (block 48 on figure 3) and the decoding of channelization code information (paragraph 21)** ~~implementing a JD algorithm on the downlink signal by using the primary and secondary channelisation codes.~~

2.2 In D1, it is only mentioned that the ACC is acquired via the midamble mapping associated to the decoding of channelization code information which is disclosed as being a layer one signal. It would be obvious to a skilled person that due to the

presence of strong adjacent channels like the BCH, a Joint Detection has to be implemented in order to decode this layer one signal carrying the missing channelisation code information.

- 2.3 Therefore the subject-matter of claim 1 does not involve any inventive step (Article 33(3) PCT).
- 2.4 Since D1 discloses the use of a layer one signal to transmit the channelisation codes information, the subject-matter of claim 15 also does not involve any inventive step (Article 33(3) PCT).
- 2.5 The same objection applies to corresponding apparatus claims 22 and 34. The subject-matter of these claims therefore does not involve any inventive step (Article 33(3) PCT).
- 2.6 Concerning the additional steps or features of dependent claims 2 to 14, 16 to 21, 23 to 33 and 35 to 39, it would be obvious to a skilled person when trying to implement the idea disclosed in paragraph 21, to look for reserved bits within existing channels in the standard, and therefore the skilled person would come across the FPACH as a channel suitable for bearing the supplementary channelization code information, and consider the well-known decoding methods as mentioned in these claims. Therefore the subject of the dependent claims does not involve any inventive step (Article 33(3) PCT).

Re Item VIII.

3. There are further objections concerning the requirements of Article 6 PCT:
- 3.1 The expressions "primary and secondary channelisation codes" first introduced in claims 1, 19, 20, 22 and 37 are not clear, since they are related to the specific default midamble case, which is not defined in these claims.
- 3.2 The difference between steps b) and c) in claim 1 remains unclear, since both of

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them (see claims 3 and 5) decodes the ACC dedicated channel.

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Box No. V Reasoned statement under Rule 43b/s.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

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